Allotment Evaluation (AE) For La Segita Northeast (#602)

| Permittee | | <u>Authorization Number</u> 3001035, 3001038 & 3017922 | | |
|-------------------|------------------------|---|-----------|----------------------------|
| T 1 TT | Preference | Allotment | Active | Suspended |
| Livestock Use | AUMs | 00602 | 315 | 74 |
| | | Permittees | Kind | Season of Use |
| | | 3001035 | 20 Cattle | $\overline{05/15 - 07/15}$ |
| | | | 27 Cattle | 10/16 - 11/29 |
| | Period of Use | 3001038 | 30 Cattle | 05/15 - 07/15 |
| | | | 40 Cattle | 10/16 - 11/29 |
| | | 3017922 | 35 Cattle | 05/15 - 07/15 |
| | | | 47 Cattle | 10/16 – 11/29 |
| | Kind of Livestock | | Cow Calf | |
| | Percent Public Land | AUMs are authorized at 92% public land | | % public land |
| Allotment Profile | Physical Description | Allotment 602 is located approximately 10 miles north of Tres Piedras in Taos and Rio Arriba Counties, New Mexico. Elevation on this allotment is roughly between 8,300 and 8,700 feet. Landforms on the allotment include; arroyos, uplands, and cinder cone and crater – La Segita Peaks and Wissmath Craters, respectively. The allotment is within the San Antonio Special Management area. Four soil types are identified within the BLM lands in this allotment; Antonito-Travelers association, gently sloping. These soils consist of loams to very stony loams, with rooting depths between 20 and 40 inches. Parent material of weathered basalt and eolian material comprises this soil. Average annual precipitation in this area ranges from 10 to 12 inches. Hazards for erosion are slight to moderate. Vegetation is characterized by western wheat, needle and thread, black sagebrush, Indian ricegrass, blue grama, fringe sage and winter fat. Rock outcrop-Raton complex, moderately steep. These soils consist of stony silt loams, with rooting depths up to 20 inches. Parent material of basalt residuum and mixed eolian sediment comprise these soils. Average annual precipitation in this complex ranges from 14 to 16 inches. Hazards for erosion are slight to moderate. Vegetation is characterized by pinyon, juniper, muttongrass, Arizona fescue and western wheat. | | |

| | | material of mixed alluvium and eolian sediment comprises this soil. Average annual precipitation in this area ranges from 10 to 12 inches. Vegetation is characterized by western wheat, blue grama, threeawn and winter fat. Stunner-Luhon association, gently sloping. These soils consist of loams, with rooting depths over 60 inches. Parent material of mixed alluvium and eolian sediment comprises this soil. Average annual precipitation in this area ranges from 10 to 12 inches. Hazards for erosion are slight to moderate. Vegetation is characterized by western wheat, blue grama, threeawn and rabbitbrush. | | |
|------------|--------------------------|--|--|--|
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| | Land Status | BLM State Private | | |
| | Acreage | 2,942 0 334 | | |
| | Management Objectives | The allotment is under an 'Improve' ('I') management category. 'I' category allotments are managed in a manner to help the allotment achieve satisfactory ecological condition. | | |
| | Key Forage Species | western wheat, blue grama, winter fat and Indian ricegrass | | |
| | Grazing System | Rotated within BLM, private and State lands | | |
| Management | Actual Use | AUMs Year | | |
| Evaluation | | 278 2009 | | |
| | | 315 2008 315 2007 | | |
| | | 184 2006 | | |
| | | 148 2005 | | |
| | | 315 2004 | | |
| | | 160 2003 | | |
| | | 151 2002 | | |
| | | 195 2001 | | |
| | | 315 2000 | | |
| | Utilization | Due to the lack of staff utilization studies have not been | | |
| | | conducted. During the assessment visit it was determined that | | |
| | | the allotment was receiving slight to moderate amounts of utilization. | | |
| | Climate | The past water year (Oct. 1, 2008 – Sept. 30, 2009) the average | | |
| | | temperature has been slightly above average (1 to 2 degrees | | |
| | | Fahrenheit above average) and precipitation has been slightly | | |
| | | above average (2 to 4 inches). The winter was slightly wetter (0 | | |
| | | 75 inches above normal) and was warmer (3 - 4 degrees | | |
| | | Fahrenheit above average). The spring was drier and warmer (0 | | |
| | | - 0.5 inches below normal and 2 - 4 degrees Fahrenheit above | | |
| | | average, respectively) This should provide near average plant | | |
| | | growth for cool season plants. The summer was near average (0 - 1.5 below normal) and slightly cooler (0 - 1 below normal) | | |
| | | | | |
| | | which should provide near normal growth for warm season plants. | | |
| | | | | |
| | | Climate change is a concern not only in New Mexico but globally. "Effects of increasing atmospheric CO ₂ levels on plants | | |
| | L | globarry. Effects of increasing authospheric CO2 levels oil plants | | |

are predicted to cause dramatic changes in native vegetation. Global climate change may accelerate rates of plant extinction, while ecosystem structure and function may shift. Ecological response to global changes in climate could shift ecosystems (i.e., shrublands replacing grasslands) and have effects, not only to an individual species, but to the ecosystem itself by additions and deletions of vegetation species" (Johnson, H.B., and H.S. Mayeux. 1992. Viewpoint: A view on species additions and deletions and the balance of nature. Journal of Wildlife Management 45:322-333.) We anticipate that our monitoring efforts will help indicate vegetation shifts, allowing for management modifications to address global climate change. Trend One long term trend plot was established on this allotment in 1983 and a new transect was established in 2009. The first transect was relocated and re-read in 2009 and shows that shrubs are increasing, but grass cover has increased also. A Rangeland Health Matrix was completed on July, 29 2009. The actual survey forms are available within the allotment file. Below is a summation of the information gathered by the survey. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be 5(score)*10indicators=50/50*100 = 100% similarity, or what is expected based on an Ecological Site Description. Standards for each individual category are met when they are rated Proper Functioning Condition or Functioning at Risk-Upward Trend. Not meeting standards are ratings of; Functioning at Risk-Static, Functioning at Risk-Downward Trend and Non Functional. Soil and Site Stability Two indicators were deemed None to Slight, five were deemed Slight to Moderate and three were deemed Moderate. Rating: 78% **Hydrologic Function** Two indicators were deemed None to Slight, five were deemed Slight to Moderate and three were deemed Moderate. Rating: 78%

| | | Biotic Integrity Four indicators were deemed None to Slight, three were deemed Slight to Moderate and two were deemed Moderate. Rating: 84% | | |
|-----------------|---|---|--|--|
| | | Overall Rating: 80% | | |
| | | Soils were rated at Functioning at Risk-Static, Biotic Flora was rated at Functioning at Risk-Static, and Biotic Fauna was rated at Functioning at Risk-Static. | | |
| | | Current livestock may be being having an adverse affect on rangeland health. There are issues with soil and vegetation in the southern portion of the allotment. | | |
| | Riparian | There is no riparian vegetation found on this allotment. | | |
| | Wildlife | Seasonal home ranges in the allotment include those for elk, deer, antelope, bobcat, fox, coyote, small mammals, bats, raptors, turkey vulture, songbirds, and a variety of insects. | | |
| | | Elk, antelope and deer are grazers; however there is little dietary overlap between deer and cattle. Best management practices would ensure that forage production within this area can support both wildlife and livestock on a sustained basis. | | |
| | | Critical wildlife areas on the allotment include winter range for elk. An important migratory corridor for avian and big-game species also occurs inside the allotment boundaries. | | |
| | Threatened and Endangered Species | It is determined that there are no federally listed threatened or endangered species likely to be found in the subject allotment. There is no designated critical habitat for any species listed by the USFWS within the allotment. | | |
| | | Special status species that are likely to be found on the allotment include bald eagle and ferruginous hawk. | | |
| Conclusions and | | Overall, the BLM lands are in good condition with good | | |
| Recommendations | | diversity. In the southern portion of the allotment, where most of | | |
| | | the water is, it appears that it has been over utilized. The greatest | | |
| | | concern is the cool season species. Continued monitoring, as | | |
| | | well as establishing more monitoring sites will help establish | | |
| | | true trend data. To mitigate the issue of cool season species it is | | |
| | | recommended that the allotment be rested in the spring every | | |
| | | third year, after an initial 2-year rest period in the spring. Fall | | |
| | | grazing would remain as is. Spring grazing (May 15 – July 15) | | |
| | | be rested as follows: | | |
| | | 2011 rest 2016 graze | | |
| | | 2012 rest 2017 graze | | |
| | | 2013 graze 2018 rest 2014 graze 2019 graze | | |
| | | 2014 graze 2019 graze 2015 rest 2020 graze | | |
| | | This rotation system for spring use will benefit both cool and | | |
| L | | | | |

| warm season grasses. Also, as an administrative note, through an | | | |
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| Exchange of Use agreement with the private landowner who | | | |
| controls the private lands within the La Segita Community | | | |
| allotment, the BLM will administer all lands within said | | | |
| allotment. This will add 33 AUMs to the allotment, and billing | | | |
| will occur at 100% public lands. Thus, it is recommended that | | | |
| the permit be renewed for 10 years; with a term and condition | | | |
| that spring grazing will follow the above table, 33 active AUMs | | | |
| be distributed proportionally between the 3 permittees as | | | |
| follows: | | | |

| 3001035 | 3001038 | 3017922 |
|-----------------|--------------------|--------------------|
| 75 + 8 = 83AUMs | 110 + 12 = 122AUMs | 130 + 13 = 143AUMs |

and billing be changed to 100% public land for all permittees. The additional 33 AUMs and change in public lands will expire if / or when the Exchange of Use agreement is terminated by either the BLM or other party. Full details are contained within the exchange of use agreement at the Taos Field Office.

